

Scotland's Rural College

Nature connectedness of conservation volunteers

Smillie, Chris; McCallum, Margaret

Print publication: 05/11/2018

Document Version

Publisher's PDF, also known as Version of record

[Link to publication](#)

Citation for published version (APA):

Smillie, C., & McCallum, M. (2018). *Nature connectedness of conservation volunteers*. Poster session presented at Biodiversity Science Conference, Edinburgh, United Kingdom.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Nature connectedness of conservation volunteers



Margaret McCallum and Chris Smillie

Scotland's Rural College

West Mains Road

Edinburgh, EH9 3JG, Scotland

Email: Chris.Smillie@sruc.ac.uk

Introduction

The conservation volunteers in this study undertook habitat management, species monitoring or visitor engagement on behalf of conservation-focused organisations. Whilst their importance is acknowledged, conservation volunteers have not been widely studied.



Wetland bird count, Loch Katrine

Study objectives included:

- Gather information about conservation volunteers' engagement
- Assess current attitudes and behaviours towards the environment
- Assess the links between pro-environmental attitudes and behaviours, and other variables such as frequency and duration of volunteering

Methods

Participants in the cross-sectional study were recruited via organisations such as RSPB, SWT, Loch Lomond and Trossachs NP or through Facebook, the sample being self-selected with a snowball element. An on-line questionnaire was used. Details about volunteers were collected along with responses to nature connectedness and environmental scales.

The scales used were the NR-6 nature relatedness scale of Nisbet and Zelensky (2013), an attitudinal scale after Hine et al (2008) and a behavioural scale adapted from Olli et al (2001) and Hine et al (2008) and incorporating the Low Carbon Scotland Behaviours Framework (Scottish Government, 2013).



Environmental improvements, Loch Venachar

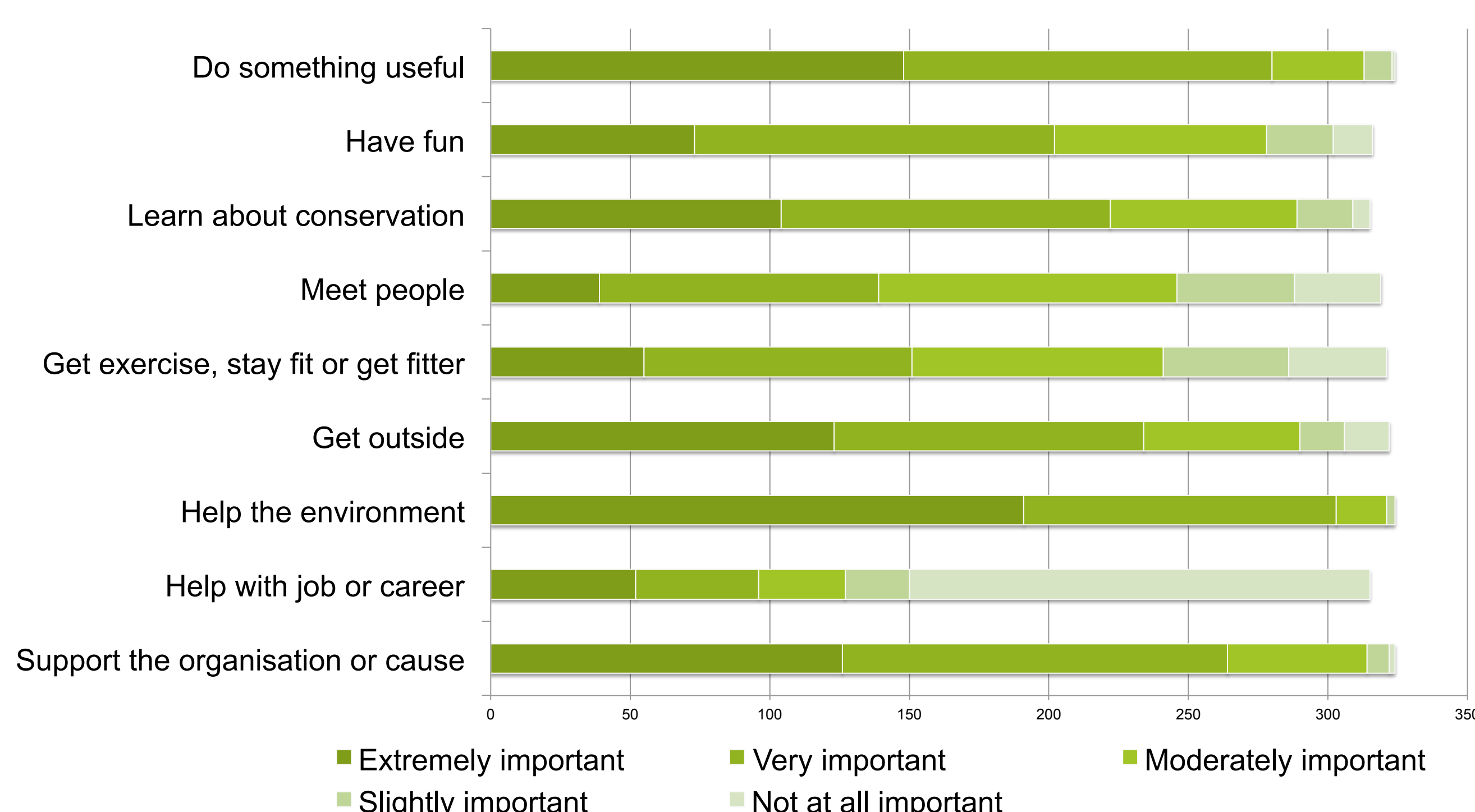
Results

Within the 327 valid responses received, Woodland Trust (88), RSPB (74) and Loch Lomond and Trossachs NP (66) were the most represented organisations. 104 respondents volunteered for more than one organisation.

Age, gender, education: Chi-square tests showed respondent age (n=325) and qualifications (n=325) were significantly different from Scottish adults. The volunteers were highly qualified, 71% to graduate level or above, and overrepresented in the 45-74 age range.

Frequency and duration: 70% of respondents volunteered at least once a month, and 66% had volunteered for one year or more (n=327).

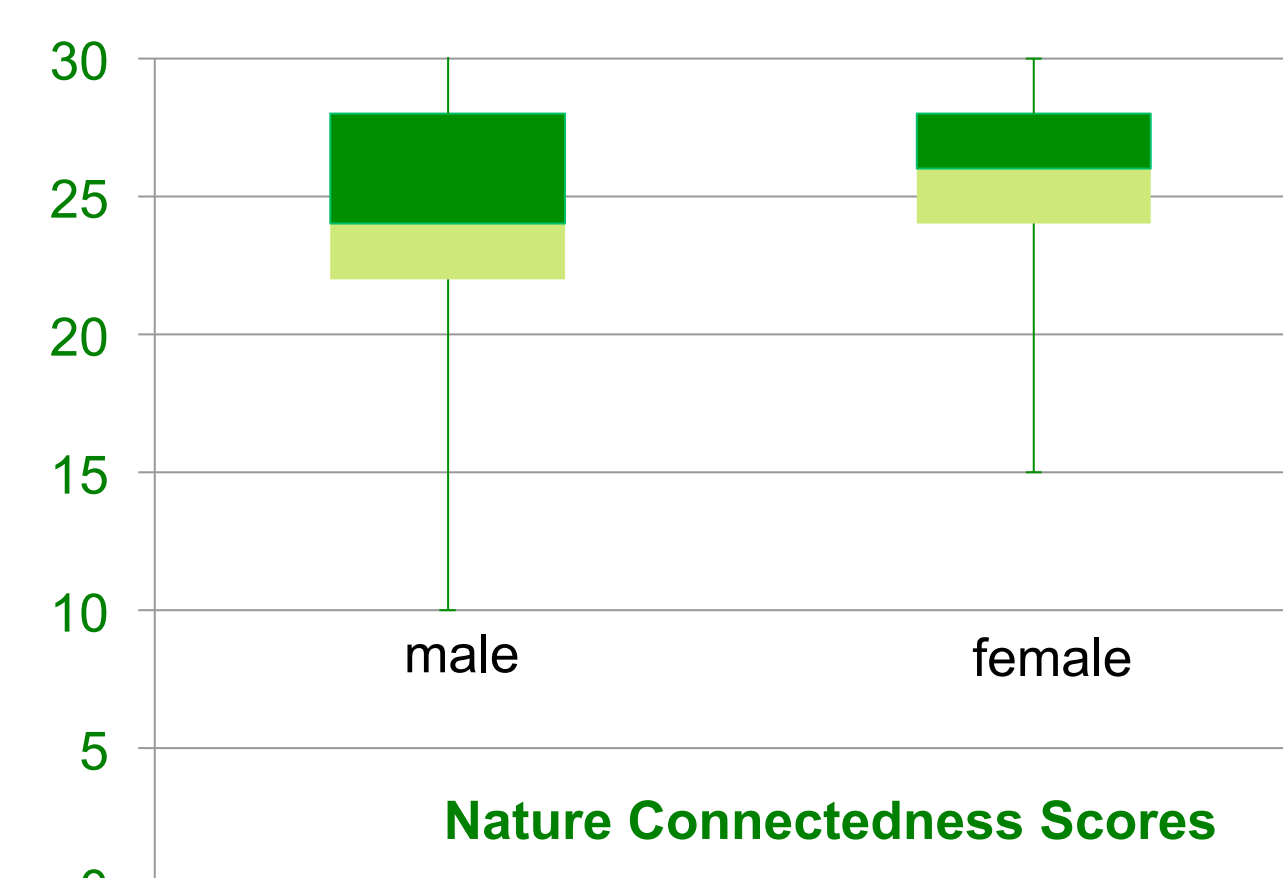
Reasons for volunteering (n= 315-324):



Environmental Attitudes and Pro-environment Behaviour scales:

The volunteers displayed a high degree of concern about biodiversity loss. Although there was a desire to alter their behaviour, this was notably lacking in the more challenging area of personal transport.

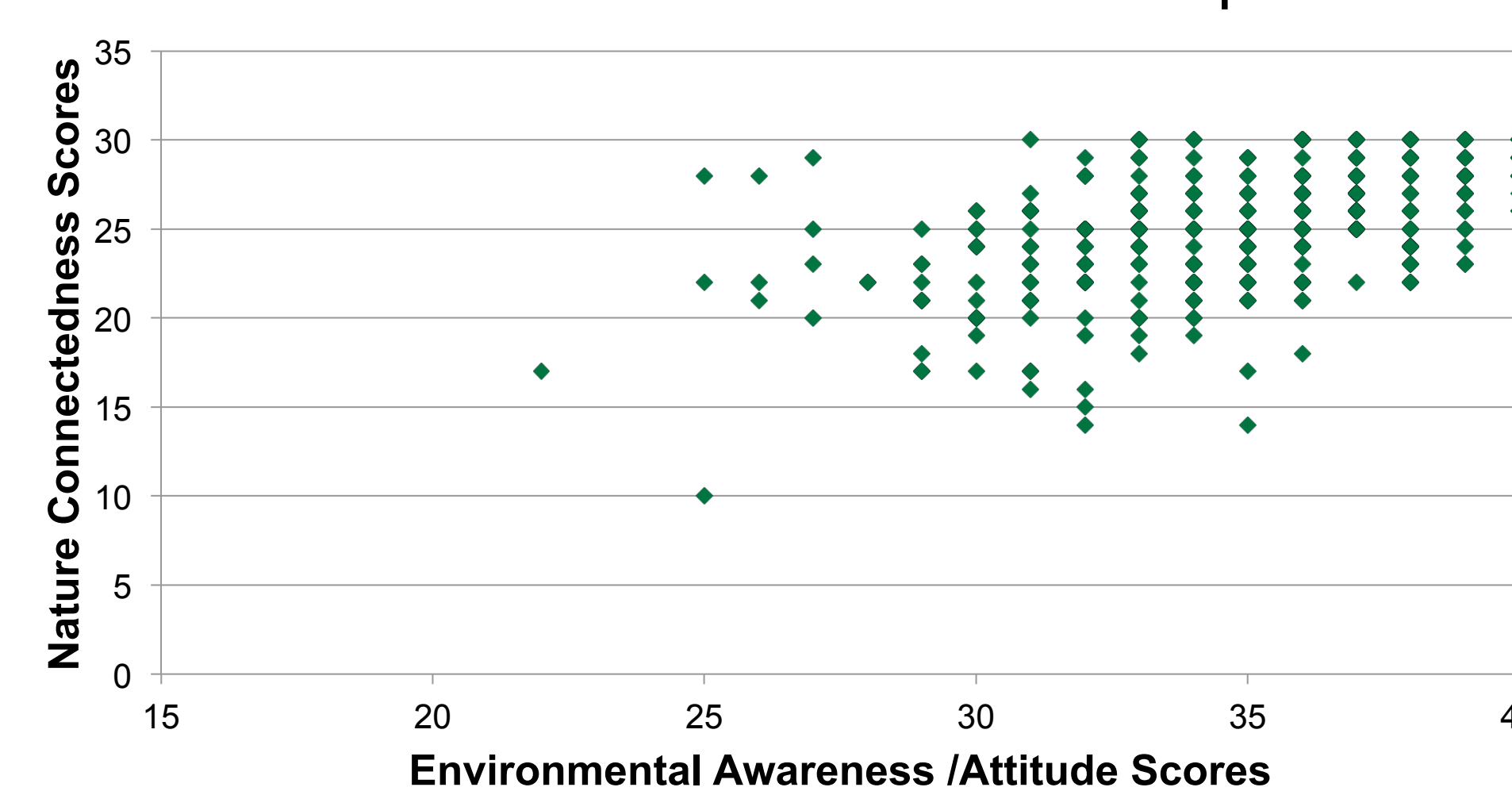
Nature Connectedness scale:



- Scores were high, negatively skewed and closely clustered of the scale originators' samples which were normally distributed
- Female Nature Connectedness scores were significantly higher and more tightly clustered than those of males, as was the case for all three scales

Correlations in the data:

The three environmental 'factors' were significantly positively associated. The strongest association was between Nature Connectedness and Environmental Attitudes (see below). The weakest was between Nature Connectedness and Pro-environment Behaviour, which could point to the influence of social norms or ease of practice adoption.



Association between Nature Connectedness and Environmental Attitude scores

Unexpectedly, higher Nature Connectedness and Environmental Attitude scores were associated with less frequent volunteering. Also, greater or lesser frequency of volunteering produced no significant difference in Pro-environment Behaviour.

Conclusions

Volunteers in the study were distinguished by:

- Older age, and high levels of educational qualification
- High scores on the environmental and nature scales
- High levels of duration and frequency of volunteering

Their reasons for volunteering are broadly similar to previous studies. The older age of the respondents would have operated against the career motivation, and in favour of following interests and passions, although for one third (n=96) the career reason was \geq very important. Additional information was offered in 151 comments, some emphasising high levels of commitment or enjoyment, and others pointing to areas of concern for volunteers.

The volunteers' commitment to environment and cause is clear, and may well be what attracted them, but that is matched by the desire to be useful and by enjoyment of the volunteering. Organisers therefore require to develop and structure involvement to fulfil those desires if they are to retain volunteer support.

Apparent uniformity of scores could be an antecedent or a consequence of conservation volunteering. The study provided data about a particular group of conservation volunteers. Studying a more representative sample would be a next step in examining environmental attitudes and behaviours, and understanding relationships among aspects of the conservation volunteer experience.

References

- Hine, R., Peacock, J. and Pretty, J., 2008. *Evaluating the impact of environmental volunteering on behaviours and attitudes to the environment*. Report for BTCV Cymru. Department of Biological Sciences, University of Essex, Colchester.
- Nisbet, E. and Zelenski, 2013. The NR-6: a new brief measure of nature relatedness. *Frontiers in Psychology*, 4, article 813
- Olli, E., Grendstad, G., Wollebaek, D., 2001. Correlates of environmental behaviours. Bringing back social context. *Environment and Behaviour* 33, pp.181–208.
- Scottish Government, 2013. Low Carbon Scotland A Behaviours Framework. From: <http://www.gov.scot/Topics/Environment/climatechange/lowcarbonbehaviours>
- Volunteer Development Scotland, 2006. *Volunteering in the natural heritage; an audit and review of natural heritage volunteering in Scotland*. SNH Commissioned Report No. 219

For more information on this study please contact: Chris.Smillie@sruc.ac.uk